The National Association of Manufacturers represents 14,000 American firms producing about 80 percent of all U.S. manufacturing output. Manufacturing comprises approximately one-fifth of all the goods and services produced by the U.S. economy, and directly supports 56 million Americans – the 18 million American men and women who make things in America and their families.

Trade is of great importance to the NAM, for more than 6 out of 10 dollars of total U.S. exports of goods and services are manufactured products. Last year, U.S. exports of manufactured goods were \$690 billion, 88 percent of total U.S. merchandise exports. The \$52 billion of agricultural goods exported last year accounted for 7 percent of U.S. merchandise exports, and mining and all other industries accounted for the remaining 5 percent.

Similarly, manufactured goods dominate our imports; last year, they accounted for 70 percent of all goods and service imports, or \$1,014 billion.

About one-sixth of our total manufacturing output is exported and, for many important industries the ratio is much higher. For example, exports account for 54 percent of U.S. aircraft production, 49 percent of machine tools, 46 percent of turbine and generator output, 45 percent of printing machinery, and the list goes on.

Benefits of Trade to Manufacturers

Too often, the trade debate focuses on mercantilist arguments that exporting industries benefit from trade while those that compete with imports suffer. Unfortunately, this view, shared by both opponents and supports of free trade, misses the point. Together, industries where either imports or exports dominate make up just 1 percent of the economy. In reality, industries that account for the bulk of U.S. exports also compete with the bulk of imports coming into our country. In manufacturing, these industries that are globally engaged are the most prosperous. Its time to change the debate from *exports are good and imports are bad* to *trade means prosperity*.

Whether measured in terms of growth in output or incomes of workers, the industries that have been the most open to the world economy have fared much better during the past decade than the rest of the economy. That this is not widely known shows that there is much work to be done to explain that what matters most is not exports or imports but openness to trade.

America is becoming more connected to the global economy. Between 1991 and 1999, trade (exports plus imports) rose from 12 percent to 14 percent of our nation's economic gross output¹. As Table 1 shows, this increased engagement can be attributed to the manufacturing sector, which makes up more than two-thirds of U.S. trade. Apart from manufacturing, the rest

¹ Gross output consists of sales or receipts and other operating income; commodity taxes; and inventory change. Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, December 2000, page 24.

of the economy, excluding farms, has remained fairly autarkic. So, it stands to reason that the effects of increased trade on the U.S. economy should be most evident in manufacturing.

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percent) of manufacturing. Industries that depend most on exports also compete most with imports. Industries that are least reliant on exports also have little import competition. Manufacturing industries roughly fit into four categories in terms of trade (see Table 2 below): *most -open, open, least open and import-dominated.*

The *most-open industries*, where exports and imports are each more than a quarter of domestic production, accounted for nearly 40 percent of manufacturing output and 60 percent of manufactured trade in 1999 (see Chart 1 attached.) Manufacturing industries that are slightly less *open* to international trade make up 30 percent of manufactured output and 20 percent of trade. The *least-open* manufacturing industries also account for 30 percent of manufactured output and just 10 percent of trade. Lastly, the *import-dominated* portion of

manufacturing represents about 3 percent of manufactured output and 10 percent of manufactured trade.²

Trade and Economic Growth

In the 1990s, manufacturing productivity grew at twice the rate of overall productivity. This is why change in real output and contribution to economic growth are much better ways to measure the health and importance of manufacturing than simply looking at employment levels. During 1991-1999, real GDP in manufacturing grew, on average, by 5.4 percent per year. This is nearly 40-percent faster than growth in the rest of the economy. In fact, manufacturers contributed to more than 21 percent of the increase in real GDP between 1991 and 1999 – more than any other sector!

Three quarters of manufacturing growth came from *most-open* industries to trade, where real GDP growth averaged more than 12 percent per year between 1991 and 1999 (see Chart 2 attached.)

Critics of free trade often say that imports suppress domestic production. While this may be true in certain circumstances, the greater truth is that import growth is generated by a strong economy: The fastest-growing manufacturing industries in the 1990s competed directly with nearly 60 percent of all manufactured imports. Trade is not "hollowing out our manufacturing sector," as some claim. Rather, trade is helping it grow and become stronger.

So, when one asks how has manufacturing been affected by trade, the answer is that the *mostopen* industries that compete directly with more than half of all manufactured imports and are responsible for roughly two-thirds of manufactured exports, grew at triple the pace of the overall economy between 1991 and 1999. Has globalization marginalized America's manufacturing base? Clearly the answer is no. Globalization has helped the manufacturing sector to evolve and become stronger.

Trade and the Manufacturing Worker

Those who work in the *most-open* industries within manufacturing have seen their wages and salaries grow the fastest in the 1990s.

By the end of the 1990s, a full-time employee in manufacturing earned, on average, \$50,000 per year – 20 percent more than the average throughout the rest of the economy. For the vast majority of manufacturing, trade and worker compensation are closely and positively related: the more industries are open to trade, the more workers get paid. In 1999, worker compensation ranged from more than \$60,000 in *most-open* industries to \$44,000 in industries *least-open* to trade (see Chart 3 attached.)

² In 1999, the gross output of import-dominated manufacturing industries was \$144 billion; exports were \$24 billion and imports were \$122 billion.

As economies become more internationally engaged, they focus increasingly on what they have a comparative advantage in producing. In the case of the United States, our comparative advantage lies in the skill of our workers and the technologies they use to build the world's most sophisticated products more efficiently than anyone else. This is why the fastest growing sectors within manufacturing have been in industries that are highly capital intensive and compensate workers with a premium wage.

Between 1991 and 1999, overall manufacturing employment grew by 263,000³. At the same time, 18.9 million jobs in other sectors were created. Within manufacturing, the only contraction in employment occurred in *import-dominated* industries, where the number of full-time workers fell by 310,000. Employment elsewhere in manufacturing grew by 573,000. Trade opponents often cite the loss of jobs within apparel manufacturing as solid evidence that imports destroy jobs. While there is no doubt that many of the job losses in this sector have been due to competition from overseas, it is important to keep in mind that *import-dominated* industries represent just 3 percent of manufacturing output, 6 percent of manufacturing employment and competed with just 14 percent of manufactured imports.

Still, the fact that our nation imports nearly as much as we produce of apparel, leather goods, and miscellaneous manufacturing shows that America does not have a comparative advantage in producing goods which depend on semi-skilled labor. To remain competitive, American firms have turned increasingly to technology and automation, and to higher-end products within the sector. This has lead to rapid increases in compensation within the *import-dominated* sector of manufacturing during the 1990s discussed below.

Overall, real compensation for a full-time worker in manufacturing in the 1990s rose by 11 percent, slightly faster than the 10 percent rise in worker pay elsewhere in the economy. Within manufacturing, compensation growth and trade are very closely and positively related, not negatively as trade opponents often claim (see Chart 4 attached.)

During the 1990s, compensation in both the *most-open* industries as well as *the import-dominated* sector grew by 13 percent in real terms, while income growth in the more autarkic sectors of manufacturing was a bit slower.

For the *import-dominated* industries, the companies that survived the past decade were those that were able to either focus on high-end manufacturing or employ new technologies to stay competitive with overseas competition. Both of these practices depended on a skill level not previously associated with this sector of manufacturing. For example, to remain competitive, shoe manufacturers now use computer-aided design and computer-aided manufacturing to increase quality, enhance design capability and lower production costs. This is evidenced by

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³ Employment in full-time equivalents, as reported by the Commerce Department's Bureau of Economic Analysis.

the fact that labor productivity for non-rubber footwear rose at an annual compound rate of 6 percent during the first half of the 1990s. Thus, even in *import-dominated* industries, international competition has served to raise worker competition and skill levels.

As for the *most-open* sector of manufacturing, which competes with the majority of imports and accounts for most of manufactured exports, being successful in international trade is based on employing skills of American manufacturers' highly trained workforce, who command premium pay for their work. Whether you are a worker or a business owner, globally engaged industries are where you want to be.

The Trade Deficit Does Not Cost Jobs

Some have argued that because the United States runs a trade deficit, trade is a net job destroyer. Essentially, the argument goes like this: Between 1992 and 1999, the United States created 20.7 million jobs. At the same time, the country's gross domestic product (GDP) grew by \$1.976 trillion after adjusting for inflation. So, every \$1 billion change in real GDP, positive or negative, affects 10,492 jobs. For example, personal consumption expenditures rose by \$1,397 billion between 1992 and 1999, "creating" (\$1,397 x 10,492) 14.7 million jobs. At the same time, our country's trade deficit grew by \$304 billion, thus "destroying" (\$304 billion x 10,492) 3.2 million jobs.

As it turns out, allocating job losses and gains to each GDP component is based on a conceptually flawed understanding of the role that net exports (the trade balance) play in national income accounting.

While many know that a nation's GDP, or C+I+G+(X-M), measures the value of goods and services produced domestically by adding up the purchases of final users: consumption (C), gross private-domestic investment (I), government expenditures (G) and the rest of the world (X-M) – the reason for the net export term is not commonly understood.

Exports are a positive entry in GDP as sales to foreigners. Imports are a negative entry that include final goods (purchased by C, I and G) plus intermediate products, like industrial supplies, that are inputs into domestic production. Just as exports are counted as value-added to the United States, imports of both intermediate and final products are counted as value-added to other nations. In other words, U.S. imports are other nations' exports. In standard national income accounting, exports and imports are combined into *net exports* (X-M).

Imports are combined with exports to create the net export term because once imports enter our country, they are seamlessly absorbed into the vast flow of economic transactions that take place every day in our country at both intermediate and final-demand levels of the economy. This adds complexity to computing GDP. When consumer demand is estimated by the Commerce Department, for example, the purchase of a domestically produced good or service cannot be differentiated from an imported one: Consumer purchases of motor vehicles, for example, include purchases of domestically produced Fords, as well as Audis made in

Germany. Moreover, imported motor-vehicle components that make up part of the value of domestically produced cars are trucks, which are also included in the consumption component of GDP. This same problem exists for the other domestic components of GDP.

So imports, already embodied in the C, I and G components of domestic demand, are removed from GDP by combining them with exports to create the term net exports. This is why the net export term is necessary in national income accounting. While it does measure the difference between domestic demand for foreign products and foreign demand for U.S. goods and services, the trade balance is not a factor of production that creates or destroys jobs. Rather, it is an accounting measure used to remove imports that are already included in the domestic components of GDP.

The paragraphs above show that the *trade deficit=net job loss* figures are inaccurate. Did the \$1,397 billion growth in consumption between 1992 and 1999 really create 14.7 million jobs? No. Some of what consumers purchased was imported!

The only way to accurately measure the number of jobs created by growth in consumer demand is to remove imports already embodied in the consumption component of GDP. Then you have a true measure of the domestic production required to fill consumer demand. The same thing goes for the other components of the economy: I and G. Once this is done, the net export term no longer exists – imports have been allocated to their respective components of GDP.

Mexico, Germany, Japan and the United States Provide Further Evidence Disproving the Trade-Deficit Job Loss Myth

Another way to show that *the trade deficit=net job loss* just doesn't add up is to look at the bilateral trade balance with Mexico. According to free-trade opponents, the \$63 billion growth in the U.S. trade deficit with NAFTA between 1993 and 2000 cost our country roughly 770 thousand jobs.

One-third of our Mexican deficit comes from oil imports that we need to fuel our economy. The rest is in manufacturing trade. As it turns out, the manufactured trade deficit with Mexico can be attributable to motor vehicles trade. That's right. Excluding motor vehicles, the United States has run a manufactured trade surplus in all but one year since the NAFTA was enacted in 1994. In 2000, this surplus totaled \$6.7 billion. Therefore, it stands to reason that if trade deficits by definition lower U.S. production and cost jobs, then the job losses caused by the U.S.-Mexico deficit must have taken place primarily in the auto sector.

However, instead of losing jobs, the number of full-time equivalent workers in the auto sector increased more than 20 percent between 1994 and 2000 – faster than overall employment growth. Our auto industry employs more than 100,000 *more* workers today than before NAFTA, because U.S. production has grown so fast. Since 1994, real GDP in the motor-vehicles industry has grown at an average annual rate of 4.8 percent, surpassing overall GDP growth by nearly 25 percent. By comparison, during the six years prior to NAFTA, motor-

vehicle output grew at an average pace of just 1.1 percent, less than half the growth rate of the economy as a whole.

The overall experiences of Germany, Japan and the United States in the 1990s further buttress the fact that trade deficits do not cause job losses. Between 1991 and 1999, Germany and Japan experienced rising trade surpluses and simultaneous reductions in manufacturing employment. At the same time, U.S. manufacturing employment remained relatively constant while our trade deficit expanded.

- Germany's merchandise trade surplus grew from \$13 billion to \$71 billion, while manufacturing employment declined 25 percent from close to 12 million to less than 9 million (see Chart 5 attached.)
- Japan's merchandise trade surplus grew from \$78 billion to \$108 billion, while manufacturing employment declined 13 percent from more than 15 million to 13 million (see Chart 6 attached.)
- The U.S.'s merchandise trade balance fell from -74 billion to -350 billion, while manufacturing employment remained roughly the same at 18.5 million (see Chart 7 attached.)

In fact, the state of domestic economics, not trade balances, determines employment levels in industrial nations. The performance of the American economy in the past six months bears this out. Due to high interest rates in 2000, a surge in energy prices, an inventory overhang, a stock market correction and a strong dollar that has suppressed exports, American industrial production has been on the decline since the fourth quarter of past year. Concurrently, imports fell by 1 percent in the fourth quarter and 9 percent in the first quarter of 2001.

There is no doubt that engagement in international trade affects America's labor force. While there is no doubt that just as trade creates employment opportunities for many, others are displaced by competition from abroad. However, labeling U.S. involvement in international trade as a net loss for American workers, due to the existence of a trade deficit, while great political theatrics, is a bogus claim that distracts policy-makers from engaging in a constructive dialog on the real challenges and opportunities that expanded trade offers our country.

International trade is not pain-free. Just like the adaptation of new technologies, international trade causes a certain amount of turmoil in the economy. And government has an appropriate role in aiding those who have been hurt by trade.

Challenges for the Future

A New WTO Round

The NAM seeks the launch of a new trade round at the Doha Ministerial that would be based on broad agreement that the negotiations should seek sharp reductions in trade barriers facing industrial goods, as well as agriculture and services.

Over the years, the WTO and its predecessor, the GATT (General Agreement on Tariffs and Trade) succeeded in sharply reducing tariffs industrial nations charged on manufactured goods, and also began to have trade rules cover such things as intellectual property, standards, government procurement, etc. Disciplines on agriculture and services, however, are still very weak. Additionally, many developing nations still maintain high tariffs on manufactured goods.

The NAM wants a new round to include among its priorities a focus on reducing industrial tariffs, particularly in developing countries. Bound tariff rates on industrial goods average 35 percent in South America, and 28 percent in Southeast Asia. By comparison, the average U.S tariff binding for industrial goods is only 3.9 percent.

An increasing amount of world trade takes place among developing countries, and some of the highest trade barriers faced by developing countries are those imposed by other developing countries. Accordingly, developing countries could be among the largest beneficiaries of sharp reductions in industrial tariffs globally. Both developed and developing countries would also benefit from a WTO agreement increasing transparency of government procurement – an agreement that would tend to reduce corruption and wasted resources in developing countries.

Free Trade Area of the Americas (the FTAA)

The NAM's top trade priority is the creation of the Free Trade Area of the Americas (the FTAA). The reason for this is that the FTAA would strongly affect the bottom line for American industry. It is of major significance to U.S. manufacturing production and employment, it is achievable in a near-term time frame; and it is of utmost importance.

There are two areas of the world where barriers are still high: South America and Southeast Asia. The FTAA would eliminate barriers throughout the Western Hemisphere, creating the world's largest free trade area – a market of 34 countries and 800 million people. The Western Hemisphere already accounts for nearly one out of every two dollars of all our exports. Most of this goes to Canada and Mexico, for the North American Free Trade Area (NAFTA) has generated a huge trade boom. We believe the FTAA will do the same for trade with Central and South America.

Last year, U.S. firms exported \$60 billion to Central and South America, an amount four times as much as we exported to China. The market is only a fraction of what it could be. Trade barriers have been holding back both our exports and the region's economic growth. This does not just affect large firms. In fact, of the 46,000 U.S. companies that export to Central or South America, 42,000 - 91 percent of the total – are small and medium-sized firms.

Based on our experience with NAFTA, the NAM predicts that with the successful negotiation and implementation of the FTAA, our present \$60 billion of annual merchandise exports to Central and South America would more than triple within a decade to nearly \$200 billion. That would represent a very considerable increase in U.S. industrial production, generating more high-paying jobs in America's factories. America's agricultural and services exports would also grow proportionately.

America is already a very open market. The FTAA would open markets for U.S. products in the rest of the hemisphere. Last year, the average import duty paid on all imports into the United States was only 1.6 percent. That is not a trade barrier; it is barely a speed bump. Moreover, two-thirds of all our merchandise imports from the world last year paid no duty at all. They entered the United States duty-free.

American exporters to South America, unfortunately, face a different situation. There, duties in major markets average 14 percent or more, and it is not uncommon for U.S. manufactured goods to face duties of 20 percent to 30 percent or higher. For example, as one of our members, the 3M company, recently testified, Colombia assesses a 20-percent duty on its U.S.-made electrical tape. Ecuador charges its filter products a 30-percent duty. And so it goes. Those are serious barriers.

There is a real urgency to negotiating the FTAA, for the European Union (EU) is also negotiating free-trade agreements with key South American countries. This is no trivial matter, for the European Union currently sells about as much to South America as we do. The consequences for U.S. exports would be severe if the EU were to obtain duty-free access to these markets while U.S. exports continued to face duties that could be 20 percent or 30 percent. A huge shift away from U.S. products to European products would result. The latest development is that Japan is now exploring the possibility of free-trade agreements with South American countries.

Trade Promotion Authority (TPA)

The one absolutely essential pre-requisite to FTAA is providing the President with Trade Promotion Authority (TPA). Our trading partners insist on having the assurance that what they negotiate with the United States will be voted on as a single package. They will not negotiate under circumstances in which the final deal turns out not to be final, but is one which Congress modifies.

It must be stated bluntly: Without Trade Promotion Authority, the FTAA negotiations simply will not move forward. The same can be said for prospective negotiations on a new round in the WTO. The Latin business communities and government officials with whom we have met were all unanimous on that point: no TPA, no negotiations.

Regrettably, some would applaud if there were to be no negotiations; but maintenance of the status quo means that we lose. Allowing Latin nations to keep their duties of 20 percent to 30 percent on major U.S. exports while we keep our 1.6 percent tariff speed bump against theirs is not a winning solution for the United States.

The time has come to stop negotiating with ourselves and to start negotiating with our trading partners. In particular, the issue of how to handle labor and environmental concerns has stalled us for too long. We must find a way to move forward, for the cost of continued inaction is about to get very expensive. How ironic it would be if we continued to debate labor rights in other countries while thousands of American workers began to lose their jobs as our foreign competitors completed trade deals with Latin America and took our export business away.

The Overvalued Dollar

At current levels, the exchange value of the dollar is having a strong negative impact on manufacturing exports, production and employment. A growing number of American factor workers are now being laid off, principally because the dollar is pricing our products out of markets – both at home and overseas.

Since early 1997, the dollar has appreciated by 27 percent against the currencies of our trading partners. Industries such as aircraft; motor vehicles and parts; machine tools and consumer goods producers are suffering. No amount of cost cutting can offset a nearly 30-percent markup.

The overvaluation is deepening the current downturn in manufacturing. Faced with stagnant domestic demand, due in large part to the inventory correction taking place in the economy, manufacturers are unable to turn to foreign markets to take up the slack, primarily because of the high value of the dollar. Merchandise exports fell by 10 percent during last quarter of 2000 and 5 percent for the first quarter this year.

This is why the NAM, along with the Association for Manufacturing Technology, the Aerospace Industries Association, the Automotive Trade Policy Council, the American Forest and Paper Association, and the Motor Equipment Manufacturers Association, sent Treasury Secretary Paul O'Neill a letter on June 4 requesting the Treasury clarify its dollar policy to be certain that it is not seen as endorsing an even stronger dollar irrespective of the economic fundamentals (to view this letter visit www.nam.org.)

Conclusion

Succeeding in the global marketplace not only means seeking out new markets for sales, but also tapping into the global supply chain. By introducing competition from abroad, imports lower costs to U.S. companies. This directly increases America's competitive edge in the global marketplace. A greater competitive edge, in turn, expands our nation's industrial base by

creating new global opportunities; since the mid-1980s, the share of U.S. manufactured goods destined for markets overseas has increased from less than

7 percent to more than 14 percent. Over the same period, America's share of world exports has increased by 20 percent.

The evidence from the 1990s is unambiguously clear: the manufacturing industries that have been the *most trade-engaged* have thrived both in terms of growth in output and worker compensation.

Attachments